

BRAUERIA (Lunz am See, Austria) 20: 22-23 (1993)

## RUSSIAN BIBLIOGRAPHY

V.D. Ivanov

1986

Леванидова, И.М., 1986. Ручейники (Trichoptera) Дальнего Востока СССР. Часть I. Семейства Rhyacophilidae и Hydrobiosidae. - В сб.: Аннотированный каталог ручейников и подёнок. Прилож. к сб. "Донные организмы пресных вод Дальнего Востока" (Владивосток, 1986). Владивосток: ДВНЦ АН СССР: 3-14.

Levanidova, I.M., 1986. Caddisflies (Trichoptera) of the Far East of USSR. Pt. I. Families Rhyacophilidae and Hydrobiosidae. - In: Annotated catalogue of caddisflies and mayflies. Supplement to the issue "Bottom organisms of the fresh waters of Far East" (Vladivostok, 1986). Vladivostok: Far East Sci. Centre, Ac. Sci. USSR: 3-14.

A short history of studies in the Far East is followed by a catalogue including 26 species of Rhyacophilidae and Hydrobiosidae; data on the distribution, flight periods, distribution areas, and larval ecology, and a reference list. There is only one species of Hydrobiosidae: Apsilochorema sutshanum Mart.

1989

Кочарина, С.Л., 1989. Содержание сухого вещества, энергоёмкость и зольность некоторых видов ручейников. - В сб.: Систематика и экология речных организмов. Владивосток, ДВО АН СССР: 63-68.

Kocharina, S.L., 1989. Dry substance content, energy capacity, and amount of ashes in some caddis species. - In: Systematics and ecology of the river organisms. Vladivostok, Far East Branch of Ac. Sci. USSR: 63-68.

Data on the dry substance content, energy capacity and ash content in the developing larvae of Stenopsyche marmorata, Arctopsyche palpata, Hydropsyche orientalis, Neophylax ussuriensis, Hydatophylax nigrovittatus, Apsilochorema sutshanum and Rhyacophila impar. Correlations of dry to fresh masses and of energy content to the amount of dry substance are given. The energy equivalent of the dried body of larvae is shown to increase from 3rd instar to the pupal stage. Data on energy capacity are given for eggs and pupal skins in S. marmorata. Decrease in the ash weight at larger biomass was shown to be characteristic only for larvae of S. marmorata.

Леванидова, И.М., 1989. Ручейники (Trichoptera) Дальнего Востока СССР. Часть II. Семейства Glossosomatidae и Hydroptilidae. - В сб.: Аннотированный каталог ручейников (Trichoptera), подёнок (Ephemeroptera) и вислокрылок (Megaloptera) Дальнего Востока СССР и сопредельных территорий. Владивосток; ДВО АН СССР: 3-II.

Levanidova, I.M., 1989. Caddisflies (Trichoptera) of the Far East of USSR. Pt. II. Families Glossosomatidae and Hydroptilidae. - In: Annotated catalogue of caddisflies, mayflies and alderflies of the Far East of USSR and adjacent territories. Vladivostok: Far East Branch of Ac. Sci. USSR: 3-11.

Data on distribution, larval habitats, flight periods are given for 22 species of caddisflies. The list of Hydroptilidae includes only 7 species. A reference list is added.

Леванидова, И.М., Лукьянченко, Т.И., Тесленко, В.А., Макаренко, М.А., Семенченко, А.Ю., 1989. Экологические исследования лососёвых рек Дальнего Востока СССР. В сб.: Систематика и экология речных организмов. Владивосток, ДВО АН СССР: 74-III.

Levanidova, I.M., Lukiyanchenko, T.I., Teslenko, V.A., Makarchenko, M.A., Semchenko, A.Yu., 1989. Ecological studies of the salmon rivers of USSR Far East. In: Systematics and ecology of the river organisms. Vladivostok, Far East Branch of Ac. Sci. USSR: 63-68.

This is a progress report and data review on hydrobiological studies in the Far East of Russia. Salmon rivers and their fauna are the main subject of the studies. The purpose of these researches is a creation of the natural hydroecological classification for the rhithral of salmon rivers in the Far East. Frolovka River was chosen for the detailed studies. The largest biomass of benthic insects, including caddisflies, was found to occur in the metarhithral. The species list of caddisflies characteristic of certain river areas includes 26 items. Data on abundance and structure of domination are given. Frolovka River is compared to northern Edinka River; differences in their faunas and ecological structures are discussed. Principles of river zonation in the Far East are reviewed.

Непомнящих, В.А., Валюшок, Л.Н., 1989.

Инстинктивное поведение личинок ручейников Chaetopteryx villosa Fabr. - В сб.: Физиология, биохимия и токсикология пресноводных животных. Л., Наука: 29-41.

Nepomnyashchikh, V.A., Valyushok, L.N., 1989. Instinctive behaviour in larvae of caddisflies Chaetopteryx villosa Fabr. In: Physiology, biochemistry and toxicology of the freshwater animals. L., Nauka: 29-41.

An experimental study of case construction was made using the partial destruction of the cases and the registration of both time and sequence of the repair stages. The fixed sequence of behaviour includes the search for a sand grain, picking up the grain, manipulation, coverage of the grain with silk, installation, glueing, case wall fastening, and case testing. Sand grain selection, body turning, walking were also observed. The macro- and microlevels of behaviour are analysed. Behavioural stereotypes are discussed.

Непомнящих, В.А., Валюшок, Л.Н., 1989.

Действие хлорофоса на строительное поведение ручейников Chaetopteryx villosa Fabr. - В сб.: Физиология, биохимия и токсикология пресноводных животных. Л., Наука: 29-41.

Nepomnyashchikh, V.A., Valyushok, L.N., 1989. Influence of chlorophos on the building behaviour of caddisflies Chaetopteryx villosa Fabr. - In: Physiology, biochemistry and toxicology of the freshwater animals. L., Nauka: 29-41.

Toxic effects of the chlorophos on the case building behaviour of Chaetopteryx villosa were investigated at the concentrations from  $1 \cdot 10^{-5}$  to  $5 \cdot 10^{-4}$  mg/l. Lower concentrations affected mainly the lining of the inner case surface with silk. Testing of sand grains and glueing were also changed at small levels of the pollutant. The sequence of stages was shown to be the most sensitive aspect of the behavioural changes. Larger concentrations of the chemical increased the mortality of larvae.

1991

Борисова, Н.В., 1991. Экологические аспекты изучения ручейников Чувашии. - В сб.: Актуальные экологические проблемы Чувашской ССР. Тез. докл. I-й Научно-практич. конф., Чебоксары, 1991. Чебоксары: 55.

Borisova, N.V., 1991. Ecological aspects of studies on the caddisflies in Chuvashia. - In: Actual ecological problems in Chuvash SSR. Abstracts, 1st scient.-pract.conf., Cheboksary, 1991:55.

There are 37 species of caddisflies from 8 families found in the Chuvash Republic situated in the Volga Basin. The role of caddis larvae in the freshwater biocenoses is discussed, some considerations on their significance as water quality indicators are given.

Козлов, А.Т., Паневин, А.С., Таратинова, Т.И., 1991. Суточная и сезонная ритмика активности личинок некоторых видов ручейников. - Зоол. ж., 70, 8: 99-105.

Kozlov, A.T., Panevin, A.S., Taratinova, T.I., 1991. Diurnal and seasonal dynamics of some caddis larvae. - Zool.zhurn. 70(8):99-105.

Diurnal movement and building activity of the larvae of *Molanna angustata*, *Limnephilus stigma*, *L.flavicornis*, *Phryganea grandis* and *Ph.striata* were investigated. The seasonal building activity and the ATP seasonal dynamics were studied in *P.grandis*, *P.striata* and *L.stigma*. Larvae were shown to have evening and morning maxima of activity. The ATP content in tissues is correlated positively with the seasonal activity.

Козлов, А.Т., 1991. Этоморфы и проблемы экологической морфологии. - ДАН СССР, 318, 2: 500-504.

Kozlov, A.T., 1991. Ethomorphs and the problems of ecological morphology. - Dokl.Ac.Sci.USSR, 318(2):500-504.

Some basic ideas of ecological morphology are discussed briefly with special attention to caddis larvae and other insect immatures (caterpillars etc.). Building behaviour of some larvae is related to the body structures and the mode of life.

Спурис, З., 1991. Коды семейств крупнейших отрядов водных насекомых для применения в ЭЕМ (Ephemeroptera, Odonata, Plecoptera, Trichoptera). - Латвийский энтомолог, 34: 111-115.

Spuris, Z., 1991. Family codes for the largest orders of aquatic insects (Ephemeroptera, Odonata, Plecoptera, Trichoptera) for the computer usage. - Latvijas Entomologs 34:111-115.

A system of coding is proposed for the data bases including the species of aquatic insects. The complete species code consists of 10 Arabic numerals: 8(means insects) + three figures (family code) + three figures (genus code) + three figures (species code); if necessary, next two figures could be added for the subspecies level. Codes of families of Trichoptera are distributed from 610 (Anomalopsychidae) to 649 (Xiphocentronidae); some small families from S.Africa are not listed.

1992

Иванов, В.Д., 1992. Новое семейство ручейников из перми Среднего Урала (Insecta, Trichoptera). - Палеонтол. журн., № 4: 31-35.

Ivanov, V.D., 1992. New family of caddisflies from the Permian of the Middle Ural (Insecta, Trichoptera). - Palaeontol.zhurn. 4:31-35.

*Uraloptysmatidae*, a monotypic amphiesmenopteran family based on *Uraloptysma maculata* gen. et sp.n. and classified as Trichoptera - Protomeropina, is described from the Lower Permian beds of Tchekarda, Middle Ural. Good quality of the remnants made possible descriptions of the structures of head, body, wings, and male genitalia. This new family is related to Microptysmatidae and differs in the numerous branches of subcostal vein in the forewings.

Козлов, А.Т., 1992. Мультифункциональность и взаимозаменяемость в действиях грудных ног личинок ручейников *Phryganea grandis* (Insecta, Trichoptera). - Зоол. ж., 71, II: 61-68.

Kozlov, A.T., 1992. Multifunctionality and interchangeability in operations of the thoracic legs in the caddisworms *Phryganea grandis* (Insecta, Trichoptera). - Zool.zhurn. 71(II):61-68.

The action of the thoracic legs during case repair was investigated in *Phryganea grandis* L. A short review on the leg functions in caddisflies and brief description of the leg structure in the species studied are given. Larvae were taken out of their cases in the experiments, some of their appendages were cut out and then the process of partly destroyed case repair was observed. Fore legs of larvae were shown to be the most important for case building and locomotion. Amputation of legs makes some statistically significant biases in the length of reparation blocks. The termination of repair is less affected by leg losses. Processes of compensation in the leg functions were observed.

Непомнящих, В.А., Подгорный, К.А., 1992. Регуляция выбора строительного материала у личинок ручейников. - Журн. общей биол., 53, 4: 609-614.

Nepomnyashchikh, V.A., Podgornyi, K.A., 1992. Regulation of the building material selection in the caddis larvae. - Zhurn.obshch.biol. (= J.general biol.) 53(4):609-614.

There are two different strategies observed in the larval behaviour of *Chaetopteryx villosa*: 1.selection of sand particles according to their relative quality, and 2.the new particle is used more frequently when the preceding one was used, and vice versa. A model for these coexisting strategies is given. The second strategy - repetition of the preceding choice - could occur in the behaviour of other species.